

REMARKS

The present application has pending claims 1-3, 10 and 11.

Information Disclosure Statement

The Examiner objected to the Information Disclosure Statement (IDS) filed on August 7, 2003 due to failing to comply with 37 C.F.R. §1.98(a)(1). Applicants herewith submit an IDS in compliance with 37 C.F.R. §1.98(a)(1). Applicants respectfully request the Examiner to consider the IDS and to provide an initialed copy of the Form PTO-1449, acknowledging consideration of the reference.

35 U.S.C. §103 Rejections

Claims 1-3, 10 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0002637 to Miyauchi et al. ("Miyauchi") in view of U.S. Patent No. 6,954,632 to Kobayashi. This rejection is traversed for the following reasons. Applicants submit that the features of the present invention, as clearly recited in claims 1-3, 10 and 11, are not taught or suggested by Miyauchi or Kobayashi, whether taken individually or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

The claims clearly describe features of the present invention. Specifically, the claims clearly recite that the present invention is directed to a telephone and a call connection control method, as recited, for example, in independent claims 1 and 10.

The present invention, as recited in claim 1, and as similarly recited in claim 10, provides a telephone applicable to a public switched telephone

network (PSTN) and an Internet Protocol (IP) network. The telephone includes a first interface and a second interface. The first interface transmits and receives analog signals over the PSTN, while the second interface transmits and receives packet data over the IP network. The telephone also includes a means for communicating with a telephone number translation server connected to the IP network through the second interface when a call is originated by entering a PSTN telephone number and obtaining from the telephone number translation server an IP network telephone number of a destination telephone corresponding to the PSTN telephone number. The telephone further includes a means for communicating with a call agent connected to the IP network through the second interface to obtain IP address information of the destination telephone corresponding to the IP network telephone number, and establishing a call connection with the destination telephone via the IP network by using the IP address information. Furthermore, the telephone includes a means for establishing a call connection with the destination telephone via the PSTN through the first interface if the IP network telephone number of the destination telephone corresponding to the PSTN telephone number cannot be obtained from the telephone number translation server. The prior art does not disclose all of these features.

The above described features of the present invention, as clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Miyauchi or Kobayashi, whether taken individually or in combination with each other.

Miyauchi teaches an Internet telephone network system, a network access method, and a talking device adapter. However, there is no teaching or suggestion in Miyauchi of the telephone or the call connection control method as recited in claim 1 and 10 of the present invention.

Miyauchi describes where an internet telephone adapter connected to a conventional telephone set has a problem of not being able to make a normal telephone call by switching to the PSTN line when the Internet telephone cannot be used. Miyauchi teaches where the telephone equipment adapter is connected to both the PSTN line and the IP network, and where the PSTN line signal transmitting/receiving unit 1100 inputs a telephone number and message information from the telephone set 10. Then the designation identifying unit 200 obtains an IP address by mapping the telephone number, generates route selecting information, and hands over the route selecting information to the line connection switching unit 100. Based on the route selecting information, the line connection switching unit 100 selects one of a route PSTN line 13 and a route from the IP network communication processing unit 5000 via the IP network 14, and transmits the message information to the telephone set 20.

One feature of the present invention, as recited in claim 1, and as similarly recited in claim 10, includes a means for communicating with a telephone number translation server connected to the IP network through the second interface when a call is originated by entering a PSTN telephone number and obtaining from the telephone number translation server an IP network telephone number of a destination telephone corresponding to the PSTN telephone number. As conceded by the Examiner, Miyauchi does not

disclose obtaining an IP network telephone number from the telephone number server, in the manner claimed.

To further illustrate the distinction, Fig. 3 of Miyauchi provides a configuration of various units of the telephone equipment adapter. The configuration includes a telephone equipment adapter 12 that is associated with a telephone set 10. The telephone equipment adapter 12 has an address translation table 302 and a telephone number/IP address translation unit 300. The translation unit 300 translates a telephone number input from the telephone set to an IP address by referring to the translation table 302. Miyauchi's step of obtaining an IP address corresponding to an input telephone number is quite different from the present invention, where an IP network telephone number of a destination telephone corresponding to the PSTN telephone number is obtained from the telephone number translation server. Therefore, Miyauchi does not teach or suggest the claimed feature.

The present invention is based on the premise that a telephone numbering scheme for an IP network telephone exists in addition to a conventional PSTN telephone numbering scheme, so that IP call connection is carried out when a call is originated with an IP network telephone number. The feature of the present invention is to specify an "IP network telephone number" corresponding to a destination PSDN telephone number when a call is originated with the PSDN telephone number.

According to the present invention, even if a call was originated with a PSTN telephone number, it is possible to establish a call connection via the IP network by converting the PSTN telephone number into an IP network telephone number and using IP address information obtained from a call

agent based on the IP network telephone number. When the IP network telephone number corresponding to the PSTN telephone number cannot be obtained, a call connection may be established via the PSTN using the PSTN telephone number.

Thus, the present invention provides a telephone service having a cheaper cost via the IP network when succeeded in conversion from a PSTN telephone number into an IP network telephone number at a telephone number translation server, even if a user makes a call by designating a destination with the PSTN telephone number instead of the IP network telephone number. Accordingly, the present invention clearly distinguishes over the prior art.

Another feature of the present invention, as recited in claim 1, and as similarly recited in claim 10, includes a means for communicating with a call agent connected to the IP network through the second interface to obtain IP address information of the destination telephone corresponding to the IP network telephone number, and establishing a call connection with the destination telephone via the IP network by using the IP address information. Miyauchi does not disclose this feature.

To support the assertion that Miyauchi teaches a means for communicating with a call agent, the Examiner cites paragraph [0158]. However, neither the cited text nor any other portion of Miyauchi teaches or suggests the claimed features.

For example, as previously discussed, Miyauchi does not teach where an IP network telephone number is obtained from the telephone number translation server, as in the present invention. Therefore, it follows that

Miyauchi does not teach where IP address information of the destination telephone corresponding to the IP network telephone number is obtained by communicating with a call agent, in the manner claimed.

By way of further example, as shown in Fig. 2, Miyauchi does not teach a means for communicating with a call agent connected to the IP network, and further does not teach obtaining IP address information of the destination telephone corresponding to the IP network telephone number, as in the present invention.

If the Examiner persists in the assertion that Miyauchi teaches this feature, Applicants respectfully request that the Examiner provide specific reasons as to why the Examiner finds Applicants' arguments unpersuasive.

Yet another feature of the present invention, as recited in claim 1, and as similarly recited in claim 10, include a means for establishing a call connection with the destination telephone via the PSTN through the first interface if the IP network telephone number of the destination telephone corresponding to the PSTN telephone number cannot be obtained from the telephone number translation server. Miyauchi does not disclose this feature.

To support the assertion that Miyauchi teaches a means for communicating with a call agent, the Examiner cites paragraph [0168]. However, neither the cited text, nor any other portion of Miyauchi teaches or suggests the claimed features. To further illustrate that Miyauchi does not teach or suggest the claimed features, the Examiner's attention is directed to paragraph [0177]. As described in paragraph [0177], Miyauchi teaches where a designation identifying unit 200 of a destination telephone set transmits its IP address if that IP address is not registered in the address translation table

of the calling side. As described in paragraphs [0179] to [0182], the telephone set of Miyauchi makes a telephone call via the PSTN line when the IP address is not registered in the address translation table 302, and the IP addresses are exchanged after completing the call to register the received IP address to the address translation table. That is to say, Miyauchi teaches selecting one of the PSTN line or the IP network line, depending on whether the destination IP address has been registered in the address table 302. This is not the same as the present invention, where a call connection is established via the PSTN if the IP network telephone number of the destination telephone corresponding to the PSTN telephone number cannot be obtained from the telephone number translation server.

If the Examiner persists in the assertion that Miyauchi teaches this feature, Applicants respectfully request that the Examiner provide specific reasons as to why the Examiner finds Applicants' arguments unpersuasive.

Therefore, Miyauchi fails to teach or suggest "means for communicating with a telephone number translation server connected to the IP network through said second interface when a call is originated by entering a PSTN telephone number and obtaining from the telephone number translation server an IP network telephone number of a destination telephone corresponding to the PSTN telephone number" as recited in claim 1, and as similarly recited in claim 10.

Furthermore, Miyauchi fails to teach or suggest "means for communicating with a call agent connected to the IP network through said second interface to obtain IP address information of the destination telephone corresponding to said IP network telephone number, and establishing a call

connection with the destination telephone via the IP network by using the IP address information" as recited in claim 1, and as similarly recited in claim 10.

Even further, Miyauchi fails to teach or suggest "means for establishing a call connection with the destination telephone via the PSTN through said first interface if the IP network telephone number of the destination telephone corresponding to said PSTN telephone number cannot be obtained from said telephone number translation server" as recited in claim 1, and as similarly recited in claim 10.

The above noted deficiencies of Miyauchi are not supplied by any of the other references of record, namely Kobayashi, whether taken individually or in combination with each other. Therefore, combining the teachings of Miyauchi and Kobayashi in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Kobayashi teaches a home network system. However, there is no teaching or suggestion in Kobayashi of the the telephone or the call connection control method as recited in claim 1 and 10 of the present invention .

Kobayashi discloses a home network system that makes it possible to build a network with assured security, where network users need not have security expertise. For access attempts offered from a home node 21-1 in a community area network 5-1 toward an outside public network 1 through a path N2, a security server 11-1 need not execute an authentication process. The home node 21-1 rejects access attempts directly transferred from the public network 1. The security server 11-1 executes the authentication

process for an access attempt transferred from the public network 1 through a path N42. When the authentication is successful, connection of the access attempt to the home node 21-1 through a path N9 is permitted.

One feature of the present invention, as recited in claim 1, and as similarly recited in claim 10, includes a means for communicating with a telephone number translation server connected to the IP network through the second interface when a call is originated by entering a PSTN telephone number and obtaining from the telephone number translation server an IP network telephone number of a destination telephone corresponding to the PSTN telephone number. Kobayashi does not disclose this feature.

The Examiner relies upon Kobayashi for teaching obtaining an IP network telephone number from the telephone number translation server, citing column 8, lines 15-21. However, contrary to the Examiner's assertions, neither the cited text nor any other portion of Kobayashi, teaches or suggests the claimed feature. For example, the cited text discloses a conventional server 121 for translating a PSTN telephone number into an IP address based on the mapping information registered in its database. With reference to the last paragraph of column 8, it is apparent that Kobayashi merely describes a convention VoIP telephony service in which "telephone number to IP address conversion" is used. This telephone number to IP address conversion of Kobayashi is quite different from the present invention, where an IP network telephone number of a destination telephone corresponding to the PSTN telephone number is obtained from the telephone number translation server.

Another feature of the present invention, as recited in claim 1, and as similarly recited in claim 10, includes a means for communicating with a call

agent connected to the IP network through the second interface to obtain IP address information of the destination telephone corresponding to the IP network telephone number, and establishing a call connection with the destination telephone via the IP network by using the IP address information. Kobayashi does not disclose this feature, and the Examiner does not rely upon Kobayashi for teaching this feature, for teaching this feature.

Yet another feature of the present invention, as recited in claim 1, and as similarly recited in claim 10, include a means for establishing a call connection with the destination telephone via the PSTN through the first interface if the IP network telephone number of the destination telephone corresponding to the PSTN telephone number cannot be obtained from the telephone number translation server. Kobayashi does not disclose this feature, and the Examiner does not rely upon Kobayashi for teaching this feature.

Therefore, Kobayashi fails to teach or suggest "means for communicating with a telephone number translation server connected to the IP network through said second interface when a call is originated by entering a PSTN telephone number and obtaining from the telephone number translation server an IP network telephone number of a destination telephone corresponding to the PSTN telephone number" as recited in claim 1, and as similarly recited in claim 10.

Furthermore, Kobayashi fails to teach or suggest "means for communicating with a call agent connected to the IP network through said second interface to obtain IP address information of the destination telephone corresponding to said IP network telephone number, and establishing a call

connection with the destination telephone via the IP network by using the IP address information" as recited in claim 1, and as similarly recited in claim 10.

Even further, Kobayashi fails to teach or suggest "means for establishing a call connection with the destination telephone via the PSTN through said first interface if the IP network telephone number of the destination telephone corresponding to said PSTN telephone number cannot be obtained from said telephone number translation server" as recited in claim 1, and as similarly recited in claim 10.

Both Miyauchi and Kobayashi suffer from the same deficiencies, relative to the features of the present invention, as recited in the claims. Therefore, combining the teachings of Miyauchi and Kobayashi in the manner suggested by the Examiner does not render obvious the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claims 1-3, 10 and 11 as being unpatentable over Miyauchi in view of Kobayashi are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claims 1-3, 10 and 11.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (referencing Attorney Docket No. 520.43016X00).

Respectfully submitted,

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